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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/626,837 | 07/25/2003 | Takeshi Iwasaki | 008312-0305236 | 9253 |
| 909 | 7590 | 10/31/2005 | EXAMINER | |
| PILLSBURY WINTHROP SHAW PITTMAN, LLP | | | BERNATZ, KEVIN M | |
| P.O. BOX 10500 | | | ART UNIT | |
| MCLEAN, VA 22102 | | | PAPER NUMBER | |
| | | | 1773 | |
| DATE MAILED: 10/31/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,837

Applicant(s)

IWASAKI ET AL.

Examiner

Kevin M. Bernatz

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,7,11 and 14-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,11 and 14-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Amendment

1. Amendments to claims 1 and 18 and addition of claims 27 and 28, filed on August 30, 2005, have been entered in the above-identified application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Request for Continued Examination

3. The Request for Continued Examination (RCE) under 37 CFR 1.53 (d) filed on August 30, 2005 is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 103

4. Claims 1, 2, 6, 7, 14 – 21 and 23 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. (U.S. Patent No. 5,851,643) in view of Hikosaka et al. (U.S. Patent No. 5,792,564) for the reasons of record as set forth in Paragraph No. 5 of the Office Action mailed on June 3, 2005.

Regarding the amended limitation(s) "formed on the nonmagnetic substrate at room temperature", the Examiner notes that this limitation(s) are/(is a) process limitation(s) and is/are not further limiting in terms of the structure resulting from the claimed process. Specifically, in a product claim, as long as the prior art product meets

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the claimed structural limitations, the method by which the product is formed is not germane to the determination of patentability of the product unless an unobvious difference can be shown to result from the claimed process limitations. In the instant case, the Examiner notes that Hikosaka et al. explicitly teaches that perpendicular recording layers meeting applicants' claimed composition limitations can be formed at room temperature (*examples, e.g. "Sputtering was performed under the conditions in which the temperature of the substrate was set to room temperature" – example 8*).

Regarding new claims 27 and 28, the Examiner notes that the claimed limitation of "wherein the second perpendicular magnetic recording layer is formed at room temperature" is a process limitation in a product claim and is not further limiting in terms of the structure resulting from the claimed process for the reasons noted above.

5. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. in view of Hikosaka et al. as applied above, and further in view of Nippon Digital (JP 02-103715 A) for the reasons of record as set forth in Paragraph No. 6 of the Office Action mailed on June 3, 2005. See provided Derwent Abstract Translation of JP '715 A.

6. Claims 1, 2, 6, 7, 11 and 14 - 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. in view of Hikosaka et al. as applied above, and further in view of Sakawaki et al. (U.S. Patent App. No. 2003/0082407 A1) for the reasons of record as set forth in Paragraph No. 7 of the Office Action mailed on June 3, 2005 –and-

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7. Claims 1, 2, 6, 7, 11 and 14 - 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. in view of Hikosaka et al. as applied above, and further in view of Sakawaki et al. (JP 2003-067910 A) for the reasons of record as set forth in Paragraph No. 8 of the Office Action mailed on June 3, 2005. See U.S. Patent App. No. '407 A1, which is the U.S. equivalent of JP '910 A.

Regarding the amended limitation(s) "formed on the nonmagnetic substrate at room temperature", the Examiner notes that this limitation(s) are/(is a) process limitation(s) and is/are not further limiting in terms of the structure resulting from the claimed process. Specifically, in a product claim, as long as the prior art product meets the claimed structural limitations, the method by which the product is formed is not germane to the determination of patentability of the product unless an unobvious difference can be shown to result from the claimed process limitations. In the instant case, the Examiner notes that both Hikosaka et al. and Sakawaki et al. explicitly teach that perpendicular recording layers meeting applicants' claimed composition limitations can be formed at room temperature (*Hikosaka et al.: examples, e.g. "Sputtering was performed under the conditions in which the temperature of the substrate was set to room temperature" – example 8; Sakawaki et al.: examples, where the Examiner notes that room temperature is read on by "100 °C or less"*).

Regarding new claims 27 and 28, the Examiner notes that the claimed limitation of "wherein the second perpendicular magnetic recording layer is formed at room temperature" is a process limitation in a product claim and is not further limiting in terms of the structure resulting from the claimed process for the reasons noted above.

Response to Arguments

8. The rejection of claims 1, 2, 6, 7, 11 and 14 - 28 under 35 U.S.C § 103(a) – Honda et al. in view of Hikosaka et al., alone or in view of various references

Applicant(s) argue(s) that “Honda clearly teaches away from Hikosaka” since Hikosaka et al. teach a longitudinal recording medium comprising a substrate and a single longitudinal magnetic layer while Honda et al. teach that multilayered media exhibit superior performance to single layered media (*page 7 of response*). A similar argument is presented with respect to Honda et al. and Nippon Digital (*pages 8 – 9 of response*). The examiner respectfully disagrees.

First, applicant(s) are reminded that “the test for obviousness is not whether features of the secondary reference may be bodily incorporated into the primary reference’s structure, nor whether the claimed invention is expressly suggested in any one or all of the references, rather the test is what the combined teachings would have suggested to those of ordinary skill in the art.” *Ex parte Martin* 215 USPQ 543, 544 (PO BdPatApp 1981). Furthermore, the Examiner notes that applicants are mischaracterizing Hikosaka et al. as teaching a longitudinal recording medium. The Examiner need only point to the title of the Hikosaka et al. invention – “***Perpendicular*** recording medium and magnetic recording apparatus”. Second, while Honda et al. may teach that dual layered media are a preferred embodiment to single layer media, Honda et al. does not teach away from using single layered media as being incapable of performing magnetic recording, hence the argument that Honda et al. teach away from

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either Hikosaka et al. or Nippon Digital is not found persuasive. Finally, the Examiner notes that Hikosaka et al. is not relied upon to teach the *structure* of the recording medium, but rather that the claimed composition of the oxide magnetic layers is known in the art. As such the disclosure in Hikosaka et al. regarding the structure of the Hikosaka et al. invention is deemed moot with regard to the issue of patentability as addressed in the rejection of record.

Applicants further argue that "Honda by itself fails to disclose, teach or suggest a perpendicular magnetic recording medium as recited in claim 1" (*page 7 of response*), hence rendering the claimed invention patentable. The Examiner respectfully disagrees.

The Examiner notes that the above argument is moot since the rejection of the pending claims is not predicated on Honda et al. solely disclosing the claimed invention.

Regarding the rejections predicated upon the combination of the above with Sakawaki et al., applicants argue that "Sakawaki does not disclose, teach or suggest a first perpendicular magnetic recording layer formed on the nonmagnetic substrate at room temperature" (*page 9 of response*). The Examiner respectfully disagrees.

As noted in the present rejection of record, the above argued limitation is a process limitation in a product claim which has not been shown to result in an *unobvious* difference in structure of the resulting product. Furthermore, both Hikosaka et al. and Sakawaki et al. appear to disclose the claimed process limitation.

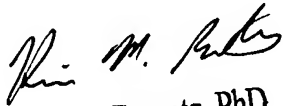
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M Bernatz whose telephone number is (571) 272-1505. The examiner can normally be reached on M-F, 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KMB
October 26, 2005


Kevin M. Bernatz, PhD
Primary Examiner